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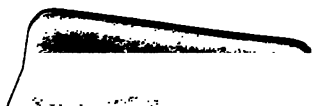
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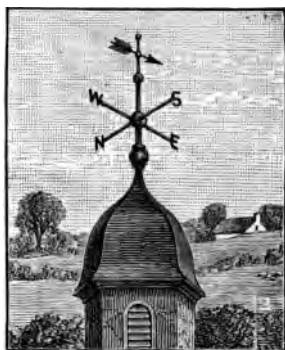
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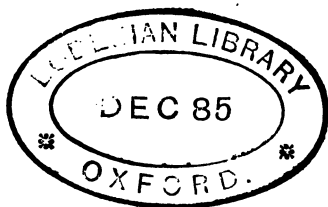
CHAMBERS'S
GEOGRAPHICAL
READER

STANDARD I.



W. & R. CHAMBERS
LONDON AND EDINBURGH
1883

2017.f.79



Edinburgh:
Printed by W. & R Chambers.

PREFACE.

THE purpose of this little book is to present in an interesting form, to the children of Standard I., the Geographical subjects required by the Code of 1882.

How to make these subjects clearly intelligible to young children is an acknowledged difficulty, which the author hopes these pages will, in a great measure, overcome.

The intelligent teacher will find in this, as in all other books of its kind, many points upon which to enlarge, both by conversation and simple illustration, as the lessons are read.

Spelling columns have been appended to the lessons, with the meanings of the more difficult words. The main fact in each lesson is given as an exercise in larger type.

It will be observed in Lesson VIII. that there is some deviation from the usual method of explaining the Cardinal Points. The teacher may make this lesson still clearer by a very simple illustration. For instance, cross two penholders in the centre, hold them in horizontal position in the left hand, and call the ends N. S. E. W. Take a marble between the thumb and finger of the right hand, and with this proceed to show how the sun gradually rises higher, until he shines *over* the South. A little tact will elicit from the children what would have been the effect upon our world, if the sun had not risen higher than when first seen in the morning.



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GEOGRAPHICAL READER.

STANDARD I.

LESSON I.

WHAT IS THE BOOK ABOUT?

1. This is what most boys and girls ask when they get a new book. But sometimes, when they find a hard word on the first page, they think the book will not be very nice to read, so they do not *look* what it is about.

2. Now we shall have to use a rather hard word here to tell you what this little book is about. We promise you it shall be the hardest word in the book, so you must not let it *hinder* you from reading all the others.

3. Perhaps we had better spell the word first. G-e-o-g-r-a-p-h-y. 'Oh dear!' you say, 'that is a long word to spell, and it will be very hard to say.'

4. When you have learned to say it, the next thing you will ask will be, '*What does it mean?*'

5. **Geography** tells us all about the great



The Sea.

round world in which we live. It tells us *about all parts* of the world; the trees and

plants that grow in them ; the hills and rivers which are found in them ; whether they are hot or cold countries ; how far they are from our own ; and how the people live, and dress, and build their houses.

6. It tells us, too, about the great sea across which our ships sail to get to these countries, and about the great cities and towns they sail to and from.

7. Then it tells us about the rising and setting of the sun ; about the clouds and the rain ; and many other things which you would like to know.

8. You must not expect to learn all these things from this little book, but you will learn enough to help you to learn more.

9. Most of you know a little geography, although you did not know it by this hard name. You know something about the town you live in, and the country all round it.

10. You know, perhaps, how many miles it is from some other town, and whether it is larger or smaller than that town. You know, too, what the people work at to get their living, how they dress, and what they eat ; what kind of houses they live in, and how they build them.

11. Then you know something about the

country outside the town. You can tell whether it is hilly or flat; whether there are any rivers flowing through it; what kinds of trees and animals you see in the fields.



The Fields.

12. If you know all these things about the place where you live, and learn all this little book will teach you besides, you will know just enough geography to make you wish to know more.

LESSON II.

ABOUT BUILDING.

1. When you have stood watching a number of workmen building a house, have you not sometimes thought it strange that they should know exactly where to leave spaces for doors, windows, fireplaces, and cupboards?

2. It has perhaps seemed to you that they laid the bricks and mortar together, and *guessed* where to leave the spaces, and how long, wide, and high to make each room.

3. But if the men were left to guess these things, we fear they would often build very crooked houses, and perhaps forget to leave a door or window in the proper place.

4. If the men who built this school had made the doors, windows, and class-rooms just where they *thought* they should be, what would have been the result? Most likely everything would have been wrong.

5. 'Oh!' you say, 'the men could not make a mistake, because their master was there to tell them how to do every part of the building.'

6. And so he was. But how did *he* know how to make the school and class-rooms and everything else, just the right shape and

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size? Because he had something made, before the building was begun, to show him what form and size each room must be, and in what part of the rooms the doors and windows were to be too. That something was a *plan*.

7. The plan was drawn on paper, then copied on the ground. Of course the copy was not made with pen or pencil, but with picks and spades, the men digging trenches, of the same shape as the lines marked out in the plan.

8. They began to build in these trenches instead of on the ground, so as to make the building stand firmly.

9. But what about the *size* of the plan? How could such a large drawing be made on a sheet of paper?

10. We must explain this in our next lesson.

watch'-ing

num'-ber

build'-ing

some'-times

thought

win'-dows

fire'-pla-ces

cup'-boards

per-haps'

to-geth'-er

guessed

crook'-ed

class'-rooms

re-sult'

ev'-er-y-thing

cop'-ied

pen'-cil

dig'-ging

trench'-es

ex-plain'

guessed, *supposed*.

result, *the end*.

trenches, *long, narrow cuts in the ground.*

Learn and write :

**The builder had a plan to guide him
in making everything correct.**

LESSON III.

THE DIFFERENCE BETWEEN PICTURES AND PLANS.



1. Looking at this little picture, you will say it is just like a real house which you have seen, although it is so small.

2. We could have very few pictures indeed in our books, or even on the walls of our houses, if they were made as large as the real things which they are so much like.

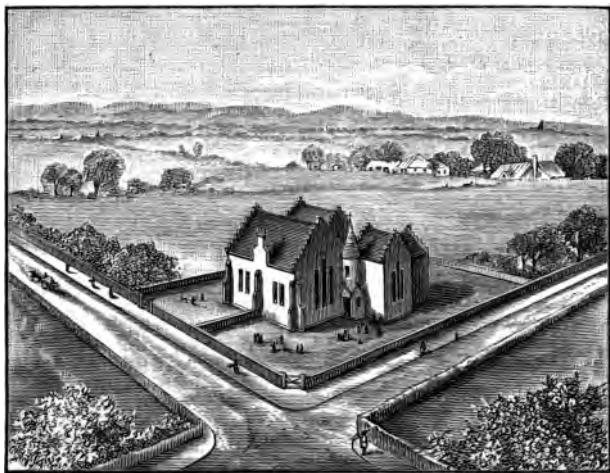
3. But you see that, though every part of the house in the picture is so small, it looks just like a real one. The reason is, that

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each part of the picture is made just so much smaller than each part of the house.

4. Just so it was with the *plan* which the builder had to guide him in building the school. A drawing, called a plan, was made on paper, showing how everything would look on the ground when the men had dug the trenches, and begun to build. Every part was made so much smaller than the rooms, windows, and doors were to be.

5. Still, there is a great difference between a picture and a plan. A picture shows you a thing *finished*, a plan shows *how to make it*.



6. *Here is a picture of the school as you see*

it from the road. You cannot tell from the picture how many rooms there are, nor the shape and size of them. Nor would the builder have known, if he had nothing but the picture to guide him.

7. The picture would simply have shown him how the school must look when finished; but he needed something to show him how to *begin* the building, so as to have everything right when finished.

8. So he had a *ground-plan* made—that is, a drawing made as if he could look down from the roof, and see just what shape the school floor would be. The drawing would appear quite flat, being made all in straight lines, showing the length of each wall.

9. There is a difference, too, in the way of making a picture and making a plan.

10. In making a *picture* of a house, the artist draws from some house which he wishes the picture to be like. In drawing out a *plan*, he is told what size the house and the rooms are to be, and makes the plan according to the size given.

11. Now, since he could not draw the whole length and breadth of a room on a sheet of paper, he draws them of a smaller size. For instance, if a room is to be

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twelve feet long, he may draw it on his plan twelve inches long, and so on with other sizes.

12. This is the way a small plan of a large building is made, and it is called *drawing to a scale*.

pic'-ture	draw'-ing	guide	show'-ing
al-though'	dif'-fer-ence	some'-thing	art'-ist
hous'-es	be-tween'	floor	ac-cord'-ing
rea'-son	fin'-ished	ap-pear'	in'-stance
build'-er	can'-not	straight	siz'-es

guide, to show the way.
appear, seem to be.

artist, one who draws plans and
pictures.

Learn and write :

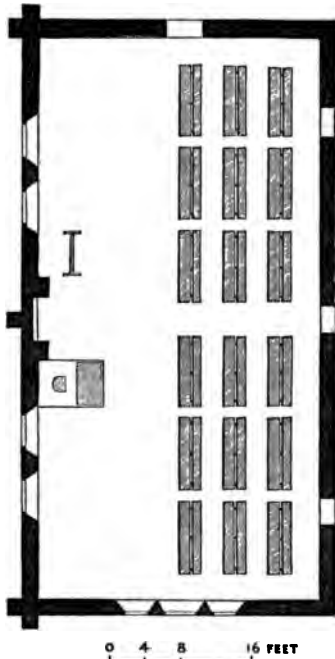
**A picture shows you a thing finished;
a plan shows how to make it.**

Four-and-twenty tailors
Went to build a house ;
Knew no more about it
Than a little mouse.
Built up all the windows,
Never left a door ;
When they reached the ceiling,
Thought they 'd do no more !

LESSON IV.

PLAN OF A SCHOOL-ROOM—DRAWN TO A SCALE.

1. Here is a very small plan of a large school-room. The room itself is sixty-four feet long, and thirty-two feet wide. The large door at the end is four feet wide, and so are the windows. The smaller doors leading to the classrooms are three feet wide. The desks are each eight feet long, and the teacher's desk is five feet.



2. What a large space is covered by the real school-room and desks! Yet this little plan shows us the exact **shape** of the room, and the places where the windows, doors, and desks are.

3. You will see at once that the plan is drawn *to a very small scale*.

4. The little line below the plan, with its marks and figures, is the scale or measure to which the plan is drawn. It is not so much as one inch long; but, in order to **make** the plan small enough, it is called sixteen feet long. Half of it is called eight feet, a quarter of it four feet.

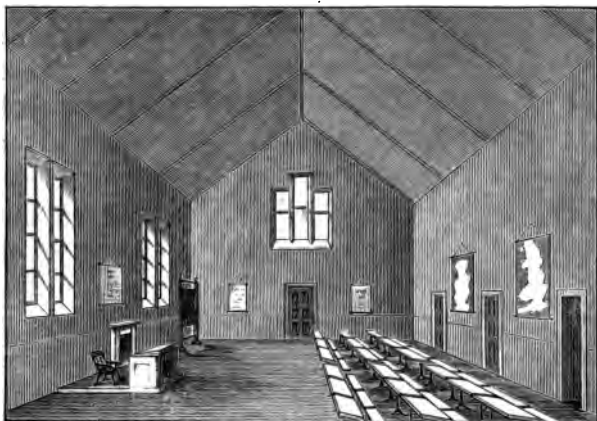
5. If you measure, you will find that the length of the plan is four times the length of the scale, which makes the long wall sixty-four feet by the scale, because 4 times 16 make 64. The breadth of the room is *twice* the length of the scale, which makes it thirty-two feet. And so you may measure the doors, windows, and desks; you will find them correct to the scale.

6. You see the plan shows us only the top of the desks, and the space which the floor covers. But in this picture of the school-room we see things as they stand. It gives us a **view** of the whole room, walls, floor, ceiling, doors, windows, and everything else.

7. 'But,' you say, 'this does not look quite right by the plan, for one end is not so wide *as the other*.'

PLAN OF SCHOOL-ROOM—DRAWN TO A SCALE. 17

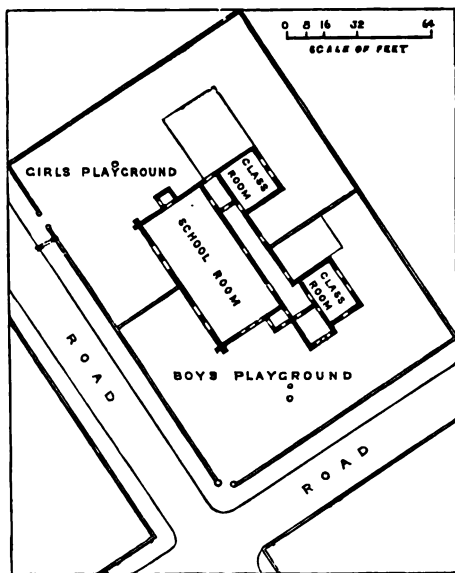
8. This is because the picture was drawn by some one standing at one end of the room. If you will stand just outside the door at the end



of the school-room, when every one is out, the other end will look smaller to you than the end at which you are standing. It is the *distance* which makes it *look* smaller, although it really is not so. The greater distance a thing is from us, the smaller it looks. So you see the picture looks to us just as the room looked to the artist who copied it.

9. You must not think that the plan of the school-room was the only one needed when the school was built. The builder needed also a ground-plan of the whole building, and of the

playground. Here is a plan of the school and playground.



10. It is drawn to a much smaller scale than the other, but it shows where each part of the school and playground is placed, and what shape it is. It told the builder how far from the

playground walls to build the school; where to put the covered playgrounds, the swings, and everything else about it.

11. Thus you will see now how it was that everything was in its right place, and of the right form and size, when the building was finished; and perhaps it will set you thinking how things would have looked had it not been for the *plan*.

PLAN OF SCHOOL-ROOM—DRAWN TO A SCALE. 19

school'-room	breadth	stand'-ing	re'-al-ly
teach'-er	cor-rect'	out'-side	need'-ed
cov'-ered	view	ev'-er-y	play'-ground
fig'-ures	cell'-ing	great'-er	ev'-er-y-thing
e-nough'	be-cause'	dis'-tance	think'-ing

view, *sight*.

| ceiling, *top of a room*.

Learn and write :

A ground-plan of the whole school and playground was drawn to a scale, to show the builder where everything must be.

WHEN I AM GROWN A MAN.

1st Boy.—*I'd like to be a builder,
When I am grown a man ;
I'd build a pretty school-room
According to a plan.*

2d Boy.—*I'd like to be an artist,
When I am grown a man ;
I'd use my scale and pencil,
And draw a perfect plan.*

3d Boy.—*I'd like to be the master,
When I am grown a man ;
I'd see my men were working
Exactly by the plan.*

All.—*But whether men or masters,
We'll do the best we can
To fill our little corner
In this world's mighty plan.*

LESSON V.

MANY THINGS ARE MADE FROM PLANS.

1. Plans are required for many other purposes than the building of houses and schools.

2. **Parks** are laid out from a plan showing the length and width of the walks, where the flower-beds are to be, and the swings, as well as the ponds, and everything else.



3. **Streets** are made from plans, which show

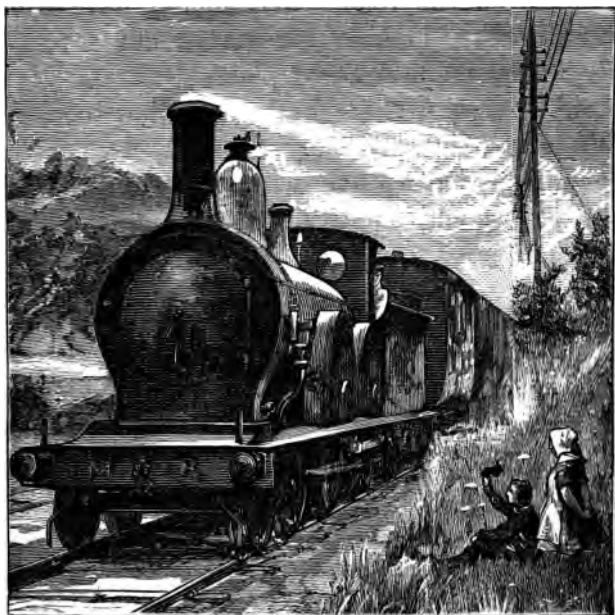
how long and wide they must be, which way they must go, and how far the houses must stand from the road. We should have some very crooked-looking streets in our towns if they were made without plans.

4. **Towns**, too, are built according to plans. We can sometimes buy a small plan of the town in which we live, with the names of all the streets and squares marked on it. Here



is a plan of part of a town, with the names of the streets. We could find our way through this part of the town, with this little plan to guide us. It would not be so easy to find our way by a picture.

5. The hundreds of miles of **railways** which run through our country were made by means



of plans, on which the places where stations must be were marked, as well as the rocks which would have to be bored through to make tunnels.

6. After reading these little lessons about plans, you will see how needful it is to have them. You will think how many things would *be out of place* in the world, if those who made

them were left to *guess* where to put them, instead of having plans to guide them.

7. We think it very likely that some of you will be trying to draw a plan, now you know how to do it.

8. No doubt some of you have a little six-inch rule of your own at home. This would do for your *scale*, and you might call each inch three feet, so that your rule would thus mark eighteen feet.

9. Some evening, when you have time to spare, take your little rule, and try to draw a plan of a room, eighteen feet long, twelve feet wide; a window, six feet wide, at one end of the room; a door, four feet wide, at the other end; and a fireplace, three feet wide, in the middle of one of the side walls.

10. This is a very easy little plan to draw, and 'if at first you don't succeed—try again.'

re-quired' rail'-ways

pur'-pos-es coun'-try

flow'-er-beds sta'-tion

hun'-dreds tun'-nels

required, *needed*.

purposes, *objects*.

read'-ing

les'-sons

need'-ful

hav'-ing

like'-ly

try'-ing

eve'-ning

suc'-ceed'

succeed, *manage to do it right*.

Learn and write:

Plans are required for making parks, streets, towns, and railways, as well as for buildings.

LESSON VI.

HOW WILL THEY FIND THEIR WAY ?



Picture of part of a Town.

1. How very easy it is to find our way in a town if we wish to go from one part to another! The streets are all named, and if we are told to go up High Street, down

Market Street, and across Church Square to reach George Street, we have nothing to do but look for these names at the street corners as we walk along. There are plenty of people passing, too, who will gladly tell us which way to go, if we are not quite sure.

2. Sometimes we wish to go out of town, to a village some miles away. But when we get out into the country roads, there is still something to guide us on our way. There are the *mile-stones* to tell us how far we have walked, and how far it is to where we are going. Then when we reach cross-roads, we shall most likely find *finger-posts*, showing us which way to turn in order to reach the village.



3. Things are very different with the people

we see in our picture. They are ready to start, but their journey is to be across hot, sandy deserts.

4. They have fruit, camel's hair, and many other things to sell, and wish to reach a town where some one will buy them.

5. It will take them many days to reach the end of their journey. There are no roads across the desert, no towns; and they will perhaps go on for days without seeing any one.

6. How it would puzzle you to find your way such a distance, as these Arabs do, without roads or streets as we have here!

7. You will at once wish to know how they find their way, and will, perhaps, be surprised to hear that they are *guided by the sun*.

8. Before starting on their journey, they decide whether to travel to the **east, west, north, or south**, and then they look to the sun to show them which way to go. Our next lesson must explain to you *how* this is done.

9. But we will not begin it without staying a minute or two here to tell you that these wandering Arabs tell the time, too, by the sun. They reckon time by sunrise, mid-day, and sunset.

10. They have no clocks or watches, so that

they cannot tell the time to a minute as we can. This does not trouble them, since the men have not to be at work, nor the children at school, at an exact time. There are no schools for them to go to.

11. No doubt you are thinking you would not like to change places with these children! Neither would they like to change with you. Streets and finger-posts, clocks and watches, would puzzle them quite as much as finding the way across the desert, and telling the time by the sun, would puzzle you.

eas'y	peo'ple	fin'-ger-posts	sur-prised'
an-oth'er	pass'ing	jour'ney	de-cide'
mar'-ket	glad'ly	des'-ert	ex-plain'
oor'-ners	vil'-lage	puz'-zle	wan'-der-ing
plen'ty	mille'-stones	dis'-tance	chil'-dren

desert, a large sandy plain.

Arabs, people who live in a desert country in the East.

wandering, moving from place to place.

puzzle, be difficult, or hard.

Learn and write :

The Arabs find their way across the desert, and tell the time, too, by the sun.



LESSON VII.

EAST, SOUTH, WEST, NORTH.



1. Have you ever been awake early enough in the morning to see the sun rise? If so, you will have seen that he always rises in the same part of the world. It is called the **East**.

2. He does not stay long where you first see him shining. If you turn your face towards him, and watch for a time, you will see that *he moves to the right*. But while he moves

to the right he rises higher and higher. He is going towards the part which we call the **South**, and which he reaches by twelve o'clock at noon.

3. As evening draws near, you will see him slowly sinking down lower and lower, until he bids 'good-night' on the side opposite to where you saw him rise, and this side is called the **West**.

4. The side opposite the south is called the **North**.

5. **North, South, East, and West** are called the four chief points of *direction*, because they *direct* or *point out* the way to go.

6. Now you will begin to see how you can find your way by the sun. If you wish to travel to the east, you must go toward where the sun rises; if to the west, toward where he sets; if to the south, stand with your *left* hand to the east, and then walk straight *before* you; if to the north, turn your *right* hand to the east, and walk straight before you.

7. The sun is said to be in the south at twelve o'clock at noon. But you must remember he shines *over* it—not appearing close to the ground, as he was in the east. If you forget that the sun rises higher as he gets toward

the south, you might perhaps think that, if you were told to travel to the south at twelve



The Sun at Noon.

o'clock at noon, you would have to go to the sky. How to get there, would puzzle you very much, and very few of you would venture to start.

8. You will understand that it is easier to

find your way by the sun when going across a desert than it would be in a town. There are no buildings in the desert to hinder you from seeing where the sun is shining—no streets to pass through, which might turn you out of the right direction.

9. If you were to set out early some bright sunny morning, and walk along the road in one direction most of the day, you would be able to tell when noon was near, or when evening was setting in, by your *shadow*.

10. When you started in the morning, your shadow would seem almost like a great giant walking by your side. If the sun were on your left hand, your shadow would be on your right. As the sun rose higher, your shadow would grow shorter and shorter behind you. Then you might know that the time was about twelve o'clock at noon, for our shadows are very short indeed when the sun reaches his highest point. When he began to go down, your shadow would begin to grow longer again, and would be on your left hand.

11. Have you ever tried to throw your shadow on the blind at home? If you stand in the middle of the room, and hold a light in your left hand, your shadow will go to the

right ; hold the light in your right hand, the



shadow will go to the left. Place the light in front of you a little higher than your head ; where will the shadow be then ? Just where it

was when the sun was high in the heavens at twelve o'clock at noon.

e-nough'

morn'-ing

called

to'-ward

high'-er

reach'-es

twelve

sink'-ing

op'-po-site

di-rec'tion

ap-pear'-ing

for-get'

un-der-stand'

eas'-i-er

hin'-der

sun'-ny

start'-ed

sha'-dow

al'-most

mid'-dle

opposite, facing.
direction, way.

hinder, stop.

Learn and write :

North, South, East, and West are called the chief points of direction. The sun rises in the East, and sets in the West.



LESSON VIII.

WHICH WAY HOME FROM SCHOOL?

1. You have all seen the points on the church tower.



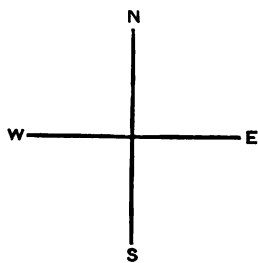
Perhaps those of you who pass by can tell by them in which direction you are going—north, south, east, or west.

2. Can you tell as you stand at the school door in which direction your home is from school? It will be easy to tell, if you first know on which side of the school the door is.

3. You are not here early enough in the morning to see the sun rise, but when the days are getting shorter, and he sets early, you may sometimes be here late enough in the afternoon to see him setting. At which end of the school does he seem to set? You know, then, that it is at the west end, and that

the end facing it is the *east*. Now, if you sit down to your desk with your left hand to the east, and your right to the west, you know your face will be towards the *south* side of the school, and your back to the *north* side. — Which wall is the door in—east, west, north, or south? When you reach the door, which direction do you take in order to get home? Those of you who go home towards the south, will come back to school towards the north; those who go to the east, return towards the west; and so on; because, whichever way your home is from school, the school is in an *opposite* direction from home.

4. Some of you cannot tell exactly which way you go. You say you seem to go *between* the south and the east, or west, or between the north and the east, or west. This shows you at once that there are other points of direction besides N. S. E. W., which mean North, South, East, West.

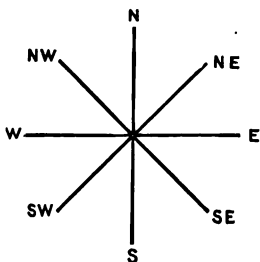


5. We will draw two straight lines, crossing in the middle, and mark the four chief points at the ends of them.

6. If we draw two other lines between

these, crossing also in the middle, we shall then have the directions in which many of you go home, if you do not go N. S. E. or W.

7. You will see that one point comes between the N. and the E. ; it is called the **north-east** ; the one between the S. and the E. is called the **south-east** ; the one between the S. and the W. is called the **south-west** ; and the one between the N. and the W. is called the **north-west**.



8. Can you tell now in which direction the town is from school, or from home? Or could you tell whether you lived at the east or west end of the town, or on the north or south side of it? Also, which way the church, the park, and the station lie from the town, or home, or school?

9. It would amuse you to make a little set of points for yourselves. Get four pieces of wood, each of them just twice the length of your six-inch rule, and about one inch wide. Find the exact half on each of them, and mark it with a lead pencil. Then bore a little hole through each where you have marked it, and fasten them together with a

small piece of wood, or a screw, taking care to cross them as we have done the lines we have drawn. Now mark the letters on each point, and try to lay it on the ground, with all its points turned in the right direction. If you lay the N. S. E. W. properly, the others are sure to be right, for the north, south, east, and west are the chief points.

10. They are also called the **Cardinal Points**, which means just the same as chief points. If you were asked to name the Four Cardinal Points, you would at once say, '*North, South, East, and West.*'

points	which-ev'er	could	through
get'-ting	be-tween'	a-muse'	fast'en
aft'er-noon	straight	your-selves'	prop'er-ly
set'-ting	cross'-ing	piec'-es	car'-din-al
re-turn'	mid'-dle	pen'-cil	asked

return, *go back.*
properly, *the right way.*

cardinal, *chief.*

Learn and write :

North, South, East, and West are the four cardinal points. The word cardinal means chief.



LESSON IX.

HOW DO SAILORS FIND THEIR WAY ACROSS THE SEA?



1. Here is a picture of a fine ship just starting out to sea. The sailors have been very busy putting her in order. They have stored away the goods she is taking to some other country, and have also taken care to store plenty of food to last them for some time.

2. They are going a very long voyage—thousands of miles across the sea. It will take them some weeks to reach the land they are sailing to, and they will be many days without seeing land at all. How will they find their way?

3. *They know in which direction the country*

they wish to reach lies, and, like the travellers in the desert, they are guided chiefly by the sun. They must be careful to *steer* the ship correctly, or she will go many miles out of her way.

4. The ship does not stop for the night when the sun goes down. Some one must watch and steer all through the night while the rest are asleep. You will wonder how they steer the ship in the right direction when the sun has gone down.

5. At night there is a star in the sky to the *north* which guides the sailors. It is called the **North Star**. It shines over the north at night, just as the sun shines over the south at noon, and shows the sailors in which direction the north lies. They know the south is in an opposite direction, and that the west will be to the left as they face toward that part over which the star is shining, and the east to the right.

6. Perhaps you are thinking the sailors must be very clever to know which is the North Star among so many. But you, too, may know if you will look out for it some clear night when the stars are shining brightly.

7. You will see a group of seven bright stars *placed as you see them in the next picture.*

They are sometimes called the *waggon and horses*. Not far from these seven stars, and nearly in a line with the two at the side, is the North Star.



8. Below is another picture of the stars as you may see them on a clear night.



Starry Night at Sea.

Do you think you could find the North Star among them?

9. But the nights are often very dark

—not a star to be seen. As you sit by a warm cheerful fire on a cold dark night, when the wind is howling outside, do you ever think of the sailors out at sea, and wonder how they find their way then? How many dangers they have to face! How easy it would be for the ship to get out of her course if left to herself! How very careful the steersman must be, or he might guide the ship on to the rocks, and she would be dashed to pieces!

10. But while steering, he keeps his eye fixed upon something which guides him when there is neither sun nor star shining. We will talk of this in our next lesson.

start'-ing	sail'-ing	wag'-gon	steers'-man
sail'-ors	trav'-el-ers	cheer'-ful	dashed
put'-ting	guid'-ed	howl'-ing	piec'-es
plen'-ty	a-mongst'	dan'-gers	steer'-ing
voy'-age	bright'-ly	care'-ful	shin'-ing

voyage, journey.

howling, making a dismal noise.

steersman, the man who guides
the ship.

dashed, thrown suddenly.

Learn and write :

The North Star is of great use to the sailors, but when the nights are dark and it cannot be seen, they have something else to steer by.

LESSON X.

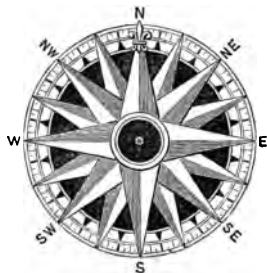
THE COMPASS.

1. When the sailor can see neither sun nor stars, he is guided by the *compass*. If you went on board a ship, you would see a compass standing not far from the steersman. When night comes, a lamp is placed near it so that he can see it all the time.

2. 'But what is the compass like, and how does it guide the sailor?' you ask.

3. A compass is made of a piece of card-board, marked with the **cardinal points**, and many others besides.

A long, flat piece of steel, called a compass-needle, is fixed on the card-board, and placed on a pivot, on which it turns round very easily. One end of it always points toward the *north*;



and it is this which guides the sailor. The compass, as shown in this picture, is placed in a brass box, with a glass top on it. No doubt some of you have seen a compass. If *not a large* one like those they use for

ships, you may have seen a very small one in a shop window, or perhaps hanging to some one's watch-chain.

4. Why does the compass-needle point toward the *north*? Because it is a *magnet*. A magnet is a piece of steel that has been rubbed against a lodestone, or against another magnet. Lodestone is a certain kind of iron, which draws pieces of iron or steel toward itself. If a piece of iron or steel is rubbed against it in a certain direction, it makes them do just what it does itself—draw other pieces to them.

5. But the strange thing about a magnet is, that one end of it **always points toward the north**. If you were to get a straight magnet made of a short piece of iron, tie a piece of string round the middle of it, hold it up and allow it to become quite still, one end of it would point toward the north, and no matter how often you turned it to the south, east, or west, it would come back to the north again. If you held another magnet near it, you might draw it away from the north. So the sailors have to be very careful not to have iron of any kind near the compass, or it might draw the point of the needle from the north, and cause them to go out of their course.

6. *We have spoken of plans in some of our*

Lessons. You will perhaps like to know that they have plans on ships. They are not like the ground-plans which builders use, but plans of the sea, showing which way the ship must sail so as to keep out of danger. These plans are called **charts**, and it is by looking at these that the captain knows which way to tell the steersman to steer.

7. Before compasses were made, sailors were afraid to sail away right *across* the sea. They used to keep in sight of land, and go a long way round to reach the end of their voyage.

nel'-ther	al'-ways	strange	care'-ful
oom'-pass	mag'-net	straight	dan'-ger
nee'-dle	rubbed	al-low'	charts
fixed	lode'-stone	an-oth'-er	cap'-tain
card'-board	cer'-tain	sail'-ors	voy'-age

*pivot, a pin or point on which
anything turns.
allow, let.*

*charts, plans used on ships.
captain, master of a ship.*

Learn and write :

The compass-needle points toward the north because it is a magnet. All magnets point toward the north; and come back to the north again, if you point them in another direction.



LESSON XI.

A MAP.

1. We have spoken of several kinds of *plans* in our lessons. The one we will speak of now is not like the ground-plan, or the ship's chart. It is a **plan of a whole country**, and is called a **map**.



2. This one is a plan of our own country, *England*. It is drawn to a scale, just as the

ground-plan was, though it is not the same scale.

3. All maps are drawn to a scale; sometimes many miles to an inch. When we remember that England is 420 miles long, and 360 miles broad, you will say this little map or plan of it is drawn to a very small scale indeed. The map on the wall is drawn to a much larger scale. Yet this little map shows us the exact shape of England just as well as the larger one.

4. There are many kinds of maps. This one is called an **outline map**, because it shows the shape a line drawn all the way round England *outside*, or close to the sea, would be. The line is called the *coast-line*, where it is washed by the sea. You will see it is not straight, but all sorts of shapes; the sea running up into it a long way sometimes. If you could go up in a balloon, high enough to see all over England at once, you would see it is the shape of this little map.

5. The top of the map is the north, the bottom the south, the *right-hand* side the east, and the *left-hand* side the west.

6. In order to turn the map in the right direction, we should have to lay it *flat* down, *with the right-hand side towards the east*,

where the sun rises, and the left-hand side toward the west, where he sets. The top of the map would then be toward the north, and the bottom toward the south, and it would show us exactly which parts of England lie toward the four cardinal points.

7. But you cannot learn from an *outline* map, all you would like to know about the country in which you live. You can learn the exact shape of it, and you can see, too, whether its coast-line is much broken into by the sea. But there is much more you would like to know, and which other kinds of maps will tell you.

spok'-en	scale	bal-loon'	can'-not
sev'-er-al	out'-line	or'-der	learn
coun'-try	out'-side	should	wheth'-er
called	washed	ex-act'-ly	coast'-line
Eng'-land	run'-ning	car'-din-al	bro'-ken

outline, *the line outside.*
exactly, *rightly.*

cardinal, *chief.*
coast-line, *land next the sea.*

Learn and write :

A map is a plan of a country, drawn to a scale. An outline map shows the exact shape of the edge, or outside of a country.



LESSON XII.

ANOTHER KIND OF MAP.



1. Here is another kind of map. You see

the *outline* just as in the other ; but there is something more.

2. This map tells us much more about England than the outline map did. Those thin winding lines show us where the **rivers** are ; and as they are all drawn to a scale, we can see at once which are the longest. Each one is in its exact place, too, so that we can tell in which part of England each river is, and in which direction it flows.

3. The clear part of the map shows us those parts of England which are very *flat*, where, in some parts, you might walk many miles without finding any hills to climb.

4. Those very short lines placed so close together, mark out where the ground rises and forms **hills** and **mountains**. The single rows of lines show where the country is *hilly*, the double rows point out the high mountains. If you could climb to the top of the highest point in these mountains, as many people do, you would be so high that the cottages and haystacks, and cows and horses in the fields below, would look almost like little toys. Before reaching the top you would most likely pass through a cloud, for the mountain is so high that clouds often rest on its top, or near it.

5. The name of this high mountain is *Snowdon*. You see the mountains and hills and rivers have names, so that we may know one from another. It would be very hard, indeed, to learn or understand geography, if we did not know the names of the different parts of a country—its mountains, hills, rivers, and towns.

6. How hard it would be to find our way in a large city like London, if the different parts of it, and the many streets in those parts, had no names! But it would be harder still to find our way about a whole country like England, but for the names its many parts have.

Eng'-land	find'-ing	hay'-stacks	Snow'-don
riv'-ers	to-geth'-er	be-fore'	un-der-stand'
long'-est	moun'-tains	reach'-ing	ge-og'-ra-phy
ex-act'	peo'-ple	like'-ly	dif-fer-ent
with-out'	cot'-tages	oft'-en	hard'-er

cottages, small houses.

Snowdon, the name of a high mountain.

understand, to know the meaning of.

Learn and write :

Some maps show us not only the outline of a country, but its hills, mountains, and rivers, all drawn to a scale, and marked in their proper places.

LESSON XIII.

OTHER KINDS OF MAPS.

1. We sometimes have maps of only a part of a country. You will see that this little map



is a plan of the *south* of England. It might be drawn to a larger scale, and have the mountains, rivers, and towns marked in it. As it is, it shows us the counties only.

2. We may have a map of any portion of a country to show us just what we wish to know about it.

3. On the next page is a map of another portion of England. Those little dots with names marked on them are towns, and the white lines show how the railways run between them. This is a map of a very busy part of England, where the cotton which comes from other countries is made into

calico, prints, and other cotton goods, which we use for clothing. *Manchester* is the largest of these towns. If you look on the west of



the map, which you see is coast-line, you will find a city called *Liverpool*. This is where the ships land with the large bales of cotton, which they bring from other countries. When it has been made into things used for clothing, a great deal of it is sent back to the places where it grew. The people who live where it grows cannot make it into calico as well as we can in our country.

4. Then we have still another kind of map. It is that part of England through which its longest river, the Thames, flows. The thick white line marks the river itself, and the thin

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lines which join it on each side show the little rivers which flow into it. Each one has its own name. Then the dots show us the towns we should pass in sailing down the Thames.



How you would enjoy a trip down the river, calling at Oxford, and at Windsor, where you would see the fine old castle, which is one of the homes of our Queen!

5. We might speak of many other kinds of maps, but you will understand them better when you know more about geography. There are maps of every country in the world, and we sometimes see a map of the world which shows us all its countries at once. It will take you a long time to learn the geography of the world, because you will have to know all about each part of it. But *you will find something new to think of in*

Each country, so that you will not be likely to get tired of learning geography.

marked	cot-ton	Thames	Wind'-sor
coun-ties	cloth'-ing	it-self	cas'-tle
por'-tion	Man'-ches-ter	en-joy'	queen
be-tween'	larg'-est	call'-ing	some'-times
cal'-i-co	Liv'-er-pool	Ox'-ford	coun'-tries

portion, *part*.

Manchester, *a large town in the cotton district.*

Liverpool, *the cotton port.*

Windsor, *a small town on the river Thames.*

Learn and write :

Sometimes a map is a plan of a part of a country or of a river; and sometimes we see a map of the whole world with all its countries.

Little Tommy Tomkins,
 Who lived on Castle Green,
 Thought he'd go to Windsor,
 And try to see the Queen.
 Went down to the river
 To hire a little boat,
 And thought it very grand
 When he was fair afloat !
 Had not learned his lessons,
 Knew not the east from west,
Guessed his way to Windsor,
 And you may guess the rest.

LESSON XIV.

THE USES OF MAPS.

1. While reading these lessons about maps, you will have thought, 'What useful things maps are!'

2. You see their chief use is to help us to



A Lighthouse.

learn geography correctly. We might learn a great deal about a country without a map, but we could not tell exactly where the mountains and rivers and towns are.

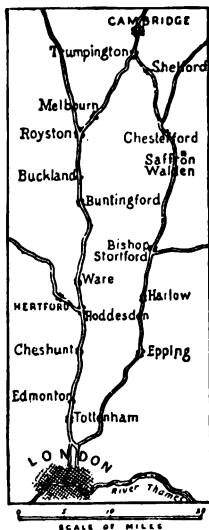
Nor could we know the shape of a country, nor how much larger or smaller it is than some other country.

3. The outline or coast-line map is very useful to sailors. Some parts of the coast are very dangerous. The rocks run out some distance into the sea, and a ship striking upon or against them might be dashed to pieces.

These dangerous parts are marked on the *maps or charts* which the sailors use, so they

know where to look out for them. Lighthouses are placed near many of them, so that the sailors may know where they are when it is dark.

4. Maps are useful, too, in teaching us to find our way, and to know how far one place is from another. If you wished to walk or ride from London to Cambridge, and no one could tell you which way to go, you could tell from a map the names of the towns and villages you would have to pass through on your way. Then the map is drawn to a scale, and the scale is put in the corner. You can measure distances by this.



5. Suppose the whole length of the scale marked thirty miles. You would easily find out by it that the distance between London and Cambridge is a little over fifty miles. And so you might find the distance between London and York, or any other places. You see a map would be of very little use in telling *us the distance* from one place to another, if

we did not know anything about *drawing to a scale*.

6. A map of the world is useful in showing us how the different countries vary in shape



The Cold North.

and size, and how to get from one to another. It also shows us which of them are in the cold northern parts of the earth, which in the south, and which in the hottest part, the *middle*.

7. If we never wished to travel, to know how far one place is from another, or to know anything about other places and countries than where we live, maps would be of very little use to us. When there were no railways, few steamboats, and very slow sailing-vessels, people did not travel as much as they do now, and there were not so many maps wanted or made as there are now.

whilst	dan'-ger-ous	teach'-ing	meas'-ure
read'-ing	dis'-tance	Lon'-don	sup'-pose'
chief	strik'-ing	Cam'-bridge	north'-ern
use'-ful	a-gainst'	vil'-lag-es	hot'-test
sail'-ors	light'-hous-es	cor'-ner	ves'-sels

dangerous, full of danger.
distance, space between.

northern, toward the north.
vessels, ships.

Learn and write :

The chief use of maps is to help us to learn geography correctly. They teach us, too, to find our way, and the distance from one place to another.



LESSON XV.

CAN YOU REMEMBER?

1. 'Remember what?' you ask. Why, what this little book has been trying to teach you.

2. There *are* boys and girls who read a book all through, and are very little wiser when they have finished it, because they do not try to remember what it says.

3. But we feel quite sure you will remember a great deal of what this little book has told you, and will be very glad that you did not let the hard word at the beginning prevent you from reading it.

4. You will remember the meaning of the word **geography**, and will think, by this time, that it is not a very hard word after all.

5. Then you will not forget all about the **buildings**—how the **plans** are made for them, and how it is that everything is in its right place when finished.

6. As you walk home from school, you will think of the **direction** in which you are going—**east, west, north, or south**.

7. You will remember, too, how the sailors find their way across the sea. You will think *of them when* you see the **North Star** at

nights, and will not forget them when the nights are dark. You will think then of the **compass**, with the lamps hung near it, and will almost fancy you see the lonely steersman looking at it as he guides the ship in the right direction.

8. Then, when you see the **maps** on the school-room walls, you will remember that they are plans of countries, or some parts of countries. Nor will you forget how very useful they are.

9. If you remember all these things, then this little book will have been of great use to you.

10. Just one more thing to remember. That is, if you wish to learn anything from a new book, you must *think* as well as *read* all the way through it.

re-mem'-ber	be-gin'-ning	lone'-ly	for-get'
try'-ing	read'-ing	guides	use'-ful
through	mean'-ing	di-rec'-tion	lit'-tle
fin'-ished	ge-og'-ra-phy	school'-room	great
quite	ev'-er-y-thing	coun'-tries	an'-y-thing

remember, *keep in mind.*

| lonely, *all alone.*

Write :

Geography. Buildings. Plans. Direction. North Star. Compass. Map. Chart. Scale.

LESSON XVI.

MUCH MORE YOU WOULD LIKE TO KNOW.

1. We have spoken a great deal about our own country, England, in these lessons. But



Chinese.



Hindoo.

when we have talked of our ships sailing across the ocean to other countries, you have perhaps thought how much you would like to know something about them.

2. You have wondered what kind of people you would meet with if you went all over the world. You would find some very strange-looking people, as you will see by these little pictures.

3. You would meet some with yellow faces, some copper-colour, some black.

4. Most of them with very funny clothes, some with scarcely any at all.

5. In the hot countries, where cotton and sugar are grown, you would find the people dressed in cotton clothing, and very little of

that. Then, if you went to the very cold northern lands, where there are always ice and snow, you would find the people muffled up in fur clothing made of the skins of bears and seals. Their houses are made of snow, and their windows of ice.



South American Indian.



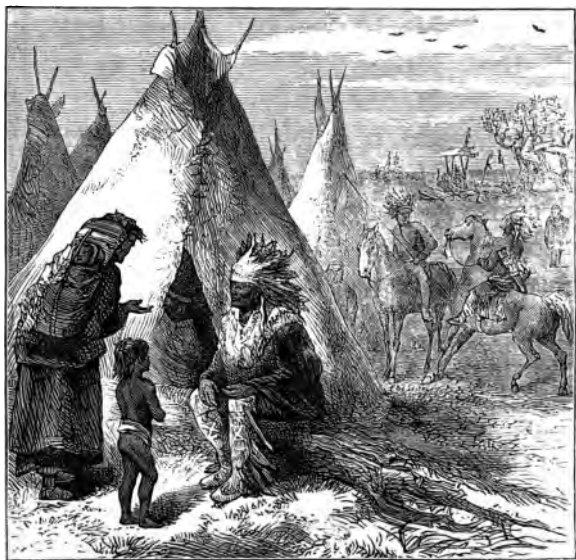
Eskimo.

The houses are built as you see them in the picture, and they creep into them through a very low doorway, which they close up with skins. There are no horses in these countries. So they must ride on sledges drawn by dogs.



Eskimo Houses.

6. In some parts of the world you would find many people living in tents. Here is a picture of tents belonging to the Red Indians. Those



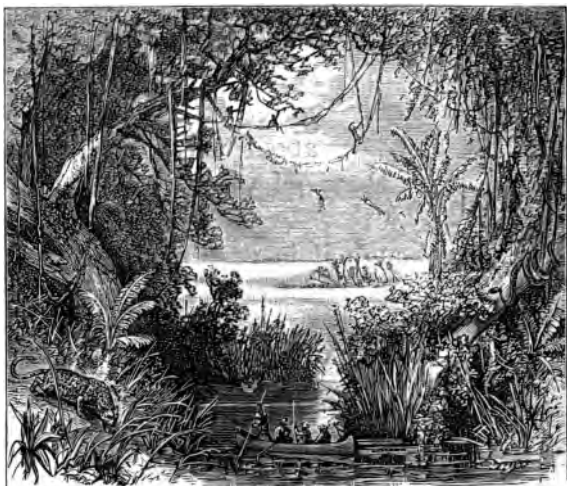
Tents of Red Indians.

who live in tents do not stay long in one place—they move about to find food for themselves and their horses or camels.

7. You would find many different kinds of animals and trees and plants as you travelled over the world. In the cold icy lands you would find the white bear, the seal, and the

whale. You would not find cows or horses or sheep; there would be nothing for them to eat, for it is too cold for grass and trees and corn to grow.

8. In the hottest countries you would find lions, tigers, and elephants; and lots of



Scene in the Warm Regions.

monkeys living in the forests of tall trees which grow there.

9. You would also find different food to eat in each country. If you paid a visit to the funny little people in the snow-houses, they would ask you to dine off a piece of fat bear

or seal. The Red Indian would feed you on the flesh of the buffalo, and green corn. In some of the hot countries you would be offered rice. The Arab in the desert would give you camel's flesh, and plenty of dates. When you reached China you might expect to get some very strange things to eat. A real Chinese will eat mice, rats, kittens, or puppies, when they are cooked. And so we might go on telling you many more things which you would like to know about these far-off lands. You will learn them as you go on with your geography.

10. But, though it is very nice to know all about these lands, and would be a great treat to visit them if you could, we think that when you came home again you would say :

‘Before all lands in east or west,
I love my own dear land the best.’





